

LISTING OF CLAIMS

Claims 1-50 (cancelled)

51. (currently amended) A conservation tillage implement comprising:

- a) a cultivator frame ~~having three or more longitudinally spaced apart transverse cross members;~~
- b) a plurality of individual coulter wheel assemblies;
- c) a mounting means corresponding to each individual coulter wheel assembly; and,
- d) ~~three or more longitudinally spaced apart rows of laterally spaced apart individual coulter wheel assemblies, each coulter wheel assembly removably individually mounted on to the frame using the mounting means and laterally spaced apart from adjacent coulter wheel assemblies in order to reduce plugging of crop residue between the coulter wheels able to be aligned with a direction of travel of the implement, a coulter wheel assembly in a given row begin staggered with respect to the coulter wheel assemblies in a longitudinally adjacent row.~~

52. (Currently amended) The conservation tillage implement according to claim 51, wherein each coulter wheel assembly is laterally adjustable ~~and able to deflect upwardly about a horizontal axis in response to impact with an obstacle.~~

53. (currently amended) The conservation tillage implement according to claim 51, wherein each coulter wheel assembly comprises a coulter wheel and a corresponding spring element, ~~the spring element having a horizontal spring axis about which the coulter wheel arcuately deflects in response to impact with an obstacle.~~

54. (currently amended) The conservation tillage implement according to claim 80 ~~[[53]]~~, wherein the spring element comprises a coil spring having upper and lower shank ends extending tangentially therefrom.

55. (Original) The conservation tillage implement according to claim 54, wherein the lower shank end is permitted to deflect upwardly about the horizontal spring axis in response to impact with an obstacle.

56. (Original) The conservation tillage implement according to claim 51, wherein the mounting means permits rotational movement of the coulter wheel assembly about a vertical axis.

57. (Original) The conservation tillage implement according to claim 56, wherein the mounting means comprises a vertically extending hollow strut having a pair of opposed horizontal slots therethrough.

58. (Original) The conservation tillage implement according to claim 57, wherein the coulter wheel assembly comprises a shank having a horizontal hole therethrough and wherein the shank is secured within the hollow strut by means of a horizontal pin extending through the slots and the hole, thereby permitting rotational movement of the shank within the hollow strut about the vertical axis.

59. (Currently amended) The conservation tillage implement according to claim 51, wherein ~~each row~~ the implement further comprises removable individual field working tools.

Claims 60-67. (Cancelled)

68. (Currently amended) A kit for making a conservation tillage implement ~~according to claim 51~~ from an existing cultivator frame comprising:

- (a) a plurality of coulter wheel assemblies;
- (b) a plurality of mounting means for mounting the coulter wheel assemblies to the cultivator frame; and,
- (c) a set of instructions for mounting ~~the each~~ coulter wheel ~~assemblies~~ assembly to the cultivator frame using the mounting means laterally spaced apart from adjacent

coulter wheel assemblies in order to reduce plugging of crop residue between the coulter wheels.

69. (Original) The kit according to claim 68, wherein the kit further comprises a stilt means for increasing the height of the cultivator frame relative to ground level.

70. (Currently amended) A method of assembling a conservation tillage implement ~~according to claim 51~~ comprising:

- (a) providing a cultivator frame ~~having longitudinally spaced apart transverse cross members;~~
- (b) providing a plurality of individual coulter wheel assemblies;
- (c) providing a mounting means ~~for corresponding to each individual coulter wheel assembly;~~ and,
- (d) ~~removably mounting the each coulter wheel assemblies assembly to the frame using the mounting means to form three or more longitudinally spaced apart rows of laterally spaced apart coulter wheel assemblies, a coulter wheel assembly in a given row being staggered with respect to the coulter wheel assemblies in a longitudinally adjacent row.~~ laterally spaced apart from adjacent coulter wheel assemblies in order to reduce plugging of crop residue between the coulter wheels.

71. (new) The conservation tillage implement according to claim 51, wherein each coulter wheel assembly is able to deflect upwardly in response to impact with an obstacle.

72. (new) The conservation tillage implement according to claim 51, wherein the frame comprises three or more longitudinally spaced apart transverse cross-members.

73. (new) The conservation tillage implement according to claim 72, wherein the implement comprises three or more longitudinally spaced apart rows of coulter wheel assemblies.

74. (new) The conservation tillage implement according to claim 73, wherein the coulter wheel assemblies are mounted to the transverse cross-members.

75 (new) The conservation tillage implement according to claim 73, wherein a coulter wheel assembly in a given row is staggered with respect to the coulter wheel assemblies in a longitudinally adjacent row.

76. (new) The conservation tillage implement according to claim 75, wherein the implement further comprises removable individual field working tools and wherein the individual coulter wheel assemblies in a given row are staggered with respect to all coulter wheel assemblies and field working tools in longitudinally adjacent rows of the conservation tillage implement.

77. (new) The conservation tillage implement according to claim 73, wherein there are a plurality of transverse cross-members for a given row.

78. (new) The conservation tillage implement according to claim 77, wherein the plurality of transverse cross-members are aligned along a common transverse axis.

79. (new) The conservation tillage implement according to claim 51, wherein the implement is able to operate at shallow depths for seedbed preparation.

80. (new) The conservation tillage implement according to claim 53, wherein the spring element has a horizontal spring axis about which the coulter wheel arcuately deflects in response to impact with an obstacle.